July 6, 2000

PART A OF THE SUPPORTING STATEMENT

1. IDENTIFICATION OF THE INFORMATION COLLECTION

1(a) TITLE AND NUMBER OF THE INFORMATION COLLECTION

Revision to the National Water Quality Inventory Reports (Clean Water Act Sections 305(b) and Revisions to EPA's Regulations Implementing Section 303(d).

ICR Number 1560.06

1(b) SHORT CHARACTERIZATION

Section 303(d) of the Clean Water Act requires States to identify and rank waters which cannot meet water quality standards (WQS) following the implementation of technology-based controls. Under Section 303(d), States are also required to establish total maximum daily loads (TMDLs) for listed waters not meeting standards as a result of pollutant discharges. In developing the Section 303(d) lists, States are required to consider various sources of water-quality related data and information, including the Section 305(b) State water quality reports. The Section 305(b) reports contain information on the extent of water quality degradation, the pollutants and sources affecting water quality, and State progress in controlling water pollution.

EPA's Assessment and Watershed Protection Division (AWPD) works with its Regional counterparts to review and approve or disapprove State Section 303(d) lists and TMDLs from 56 respondents (the 50 States, the District of Columbia, and the five Territories). Section 303(d) specifically requires States to develop lists and TMDLs "from time to time" and EPA to review and approve or disapprove the lists and the TMDLs. EPA also collects State 305(b) reports from 59 respondents (the 50 States, the District of Columbia, five Territories, and 3 River Basin commissions).

The Office of Management and Budget (OMB) previously approved information collection authority for the submission of State 305(b) reports under 40 CFR 130.10(a) of the EPA Water Quality Management Standards under OMB Number 2040-0071 (ICR Number 1560.1). In 1992, OMB approved an addendum to ICR 1560.1 clarifying the burden associated with preparing State 303(d) lists of waters for inclusion in the 305(b) reports. OMB reapproved the ICR for the period 1993 -1995, 1996 - 1998, and then again from March 1999 - April 2003 (ICR Number 1560.05, approved April 5, 2000). This proposed ICR covers the period for July 2000 - June 2003.

This Supporting Statement revises the currently approved ICR based on changes EPA is making to the Section 303(d) regulations. These revisions increase the burden to States for four Section 303(d) activities related to preparation of the Section 303(d) lists: revising the listing methodology, establishing schedules for TMDL development, increased public participation, and providing the listing methodology in a new format. EPA's currently approved ICR for the period March 1999 through April 2003 was based on the burden to respondents of the current program and did not include consideration of the impact of the revised regulations (however, the additional burden to the Agency of the revised regulations was included in the ICR). The revisions contained

in this Supporting Statement include the increased 303(d) listing burden to States that would result under the final regulations.

As required by OMB's Terms of Clearance for the approved ICR for March 1999 to April 2003, this Supporting Statement includes the respondent burden associated with developing TMDLs. This burden was not estimated in previous ICRs, but can now be included due to recent advances in EPA's ability to estimate the cost of developing TMDLs. In this ICR, the burden for developing TMDLs is divided into two parts: the burden associated with the current TMDL regulations, and the additional burden associated with the new requirements for the final revisions to the TMDL regulations. The new requirements add two additional TMDL development tasks: preparation of an implementation plan, and written response to public comments regarding the TMDL.

As also required by OMB's Terms of Clearance for the approved ICR for March 1999 to April 2003, this Supporting Statement estimates the burden to respondents of providing information as required by 305(b) on the costs and benefits of attaining water quality standards, and the burden to the Agency of providing guidance to respondents for preparing this information. Although this is not a new requirement, the burden of providing this information has not been estimated in previous ICRs, whether based on the effort associated with the current practices of respondents in providing this information or whether based on the availability of improved guidance for developing this information.

This Supporting Statement does not include: 1) the reduction in respondent burden resulting from the final regulations' adoption of a 4-year 303(d) listing cycle instead of the current 2-year 303(d) listing cycle because the savings (although substantial over time) would likely not be realized for the period covered by this ICR; 2) the reduction in respondent burden resulting from EPA's March 27, 2000 rule removing the federal requirement for States to submit their 303(d) lists in 2000 (skipping this listing cycle) because the timing of the rule's issuance makes it difficult to estimate the extent to which savings occurred; and 3) the Agency's burden associated with the final revisions to the regulations because these were already included in the Agency's approved ICR for March 1999 to April 2003.

2. NEED FOR AND USE OF THE COLLECTION

2(a) NEED/AUTHORITY FOR THE COLLECTION

Section 303(d) of the CWA establishes the total maximum daily load (TMDL) process to provide for more stringent water-quality based controls when required controls are inadequate to achieve State water quality standards. States must identify waterbodies that do not or are not expected to meet applicable water quality standards solely through the implementation of technology based controls. These waterbodies are referred to as water-quality limited waterbodies.

> "(d)(1)(A) Each State shall identify those waters within its boundaries for which the effluent limitations required by section 301(b)(1)(A) and section 301(b)(1)(B) are not stringent enough to implement any water quality standard applicable to such waters. The State shall establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters.
>
> (B) Each State shall identify those waters or parts thereof within its boundaries for which controls on thermal discharges under section 301 are not stringent enough to assure protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife.
>
> (C) Each State shall establish for the waters identified in paragraph (1)(A) of this subsection, and in accordance with the priority ranking, the total maximum daily load, for those pollutants which the Administrator identifies under section 304(a)(2) as suitable for calculation. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality.
>
> (D) Each State shall estimate for the waters identified in paragraph (1)(B) of this subsection the total maximum daily thermal load required to assure protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife..."

Section 303(d)(2) requires States to submit the lists of water-quality limited waterbodies and associated TMDLs to the EPA "from time to time."

> "(2) Each State shall submit to the Administrator, from time to time, with the first submission not later than one hundred and eighty days after the date of publication of the first identification of pollutants under section 304(a)(2)(D), for his approval the waters identified and the loads established under paragraphs (1)(A), (1)(B), (1)(C), and (1)(D) of this subsection..."

EPA's Water Quality Planning and Management regulation (40 CFR 130) currently defines "from time to time" as a biennial reporting requirement for submitting prioritized lists of water-quality limited waters still requiring TMDLs. The revised final regulation adopts a 4-year listing cycle instead of the biennial listing cycle, starting with the listing required for 2002.

TMDLs are required for 303(d)-listed waterbodies when other Federal, State and local controls will not lead to the achievement of water quality standards. TMDLs provide a rational method for weighing competing water quality concerns and developing an integrated strategy for point and nonpoint sources. TMDLs encourage a holistic view of water quality problems considering all contributions and the in stream water quality and provides a method to allocate those contributions so that water quality standards will be met.

Section 305(b)(1) of the CWA requires States in their biennial water quality assessment reports to estimate the costs and benefits of achieving water quality standards, specifically:

> "(D) an estimate of (i) the environmental impact, (ii) the economic and social costs necessary to achieve the objective of this Act in such State, (iii) the economic and social benefits of such achievement and (iv) an estimate of the date of such achievement;"

2(b) USE / USERS OF THE DATA

The Watershed Branch of AWPD uses the information submitted under Section 303(d) to track State progress in preparing TMDLs for water-quality limited waterbodies still requiring TMDLs. Consistent with the requirements of Section 303(d), the Watershed Branch of AWPD and its Regional counterparts review the Section 303(d) lists submitted by the States to review whether they comply with the requirements of the statute and EPA's regulations and reflect an accurate State-by-State accounting of waterbodies not meeting water quality standards (WQS) after the application of technology-based controls. Also as required by Section 303(d), EPA reviews TMDLs developed and submitted by the States to determine their technical sufficiency and whether they otherwise comply with the requirements of Section 303(d) and the EPA regulations.

AWPD uses the biennial 305(b) reports as a principal information source to prepare the National Water Quality Inventory Report to Congress. The Office of Water uses the Report to Congress to target persistent and emerging water quality problems with new initiatives and to improve or eliminate ineffective programs.

3. THE RESPONDENTS AND THE INFORMATION REQUESTED

3(a) RESPONDENTS / SIC CODES

The respondent community for 303(d) consists of 50 States, the District of Columbia, and the five Territories (Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Northern Mariana Islands). The SIC code for respondents is 9511 (Administration of Environmental Quality Programs: Air and Water Resources and Solid Waste Management). Although Indian Tribes are not exempt from 303(d) requirements, there is not a process currently in place to designate them for this purpose. Further, very few Tribes have established water quality standards, and EPA is currently in the process of preparing standards where they are needed. Therefore, we assume that there would no burden to Indian Tribes over the period covered by this ICR.

The respondent community for 305(b) consists of 50 States, the District of Columbia, the five Territories (Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Northern Mariana Islands) and 3 River Basin Commissions (the Ohio River Valley Sanitation Commission, the Delaware River Basin Commission, and the Interstate Sanitation Commission have jurisdiction over basins that lie in multiple States). The SIC code for respondents is 9511 (Administration of Environmental Quality Programs: Air and Water Resources and Solid Waste Management). Indian Tribes are exempt from the 305(b) reporting requirement, and so no burden is estimated for them in this ICR.

3(b) INFORMATION REQUESTED

Data Items

Consistent with Section 303(d)(1), States submit to EPA for review and approval/disapproval action a list of waterbodies not attaining standards after the application of technology-based controls. The statute requires States to establish a priority ranking for these waterbodies taking into account the severity of the pollution problems and the designated uses of each waterbody. In conformance with the CWA, States apply individual approaches to assign priority to the order in which TMDLs will be established for each identified waterbody.

Consistent with Section 303(d)(2), States establish TMDLs for waterbodies not meeting water quality standards as a result of pollutant discharges. A TMDL is a written, quantitative assessment of water quality problems and contributing pollutant sources. It specifies the amount that pollutant loadings need to be reduced for the waterbody to attain water quality standards and allocates pollutant load reductions among sources in a watershed. Section 303(d) requires States to submit TMDLs to EPA for review and approval/disapproval action.

Consistent with Section 305(b)(1)(D), States must provide in their biennial water quality reports an estimate of the environmental impact, the benefits and economic and social costs of achieving the CWA goals in the State, and an estimate of the date when the State will achieve the goals. In previous ICRs, EPA has recognized that this information may not be readily available due to the complexities of the analysis involved. Therefore, respondents provide information (to the extent possible) on the costs of pollution control activities, capital investment in municipal and industrial facilities (including the cost of operating these facilities), and the costs of administering State and local water pollution control activities. Respondents also provide, if possible,

information on the beneficial actions taken to maintain or improve water quality conditions. As a Term of Clearance for the ICR for the current 305(b) and 303(d) programs covering the period March 1999 through April 2003, OMB has required that an estimate be made in this ICR of the burden associated with estimating costs and benefits. This ICR estimates the burden that would be associated with a more significant activity than EPA has previously expected or estimated.

Respondent Activities

The burden associated with the current program was already included in the approved ICR (Number 1560.05) for the period March 1999 through April 2003. Further, the final revisions to the regulations do not require the collection of any additional data beyond the current program.

The revised regulations include four additional tasks associated with the development of 303(d) lists as follows:

1. Revise the Methodology for Setting Priorities. The current program already requires that priorities be set for listed waterbodies. The revised regulation requires that listed waterbodies be grouped into 4 Parts (1-4). Only Part 1 waterbodies (those impaired by pollutants) require TMDLs and these must have high, medium and low priorities set for them. Any additional public participation costs related to this are included in task 3 below. This is a one-time burden that would not be included in future ICRs.

2. Establish a Schedule. Lists must include schedules for establishing the required TMDLs over the next 10 years, replacing the existing requirement to target only those TMDLs that will be completed within the next 2 years. However, EPA will only review and approve the schedule for those TMDLs that are expected to be completed within the next 4 years. Any additional public participation costs related to this are included in task 3 below. The initial effort to establish these schedules is included in this ICR. The burden needed to revise these schedules in future periods is expected to be lower than estimated for this ICR.

3. Additional Public Participation. A State's listing methodology must be subject to public review and submitted to EPA by April 1 two years prior to the listing year. In addition, there may be a need for additional public participation regarding the other revisions to the State's listing program resulting from the revised regulation. The additional public participation is estimated to be most significant for the period covered by this ICR because this will be the public's first opportunity to review any changes resulting from the revised regulations. However, the additional public participation in future periods resulting from the revised regulations is expected to be much less than the amount estimated for the period covered in this ICR.

4. New Format for the Listing Methodology. A State's listing methodology must be presented in a specific, new format. The cost of adopting the new format is a one-time burden that would not be included in future ICRs.

The revised regulations include two additional tasks associated with the development of TMDLs:

1. Implementation Plans. TMDLs must include an implementation plan providing a framework, in a level of detail appropriate to the circumstances, for actions needed to implement the TMDL and achieve and maintain WQS.

2. Written Response to Public Comments. The revised regulations require that TMDLs include a written summary of public comments and the response to them.

These additional burdens are incurred, to varying degrees, with every TMDL that is developed. These are burdens that are additional to that already required for the development of TMDLs under the current program.

The current program already requires the development of TMDLs for impaired waterbodies. The burden associated with developing TMDLs is not attributable to the revised regulations. However, estimates for the burden of developing TMDLs under the current program have not been included in previous ICRs, and so this ICR includes an estimate of that burden. The tasks for developing a TMDL under the current program include:

1. Watershed characterization,

2. Modeling and analysis,

3. Allocation analysis,

4. Development of TMDL document for public review,

5. Public outreach,

6. Formal public participation and response

7. Contingency for planning, tracking, legal support, extra outreach, etc.

The burden associated with these tasks under the current program is estimated in this ICR, both for individual TMDLs, as well as for the total number of TMDLs that may be submitted during the period covered by this ICR.

The current program also requires that the 305(b) biennial water quality reports include an estimate of the environmental impact, the benefits and economic and social costs of achieving the CWA goals in the State, and an estimate of the date when the State will achieve the goals. In previous ICRs, EPA has recognized that this information may not be readily available due to the complexities of the analysis involved. Therefore, respondents provide information (to the extent possible) on the costs of pollution control activities, capital investment in municipal and industrial facilities (including the cost of operating these facilities), and the costs of administering State and local water pollution control activities. Respondents also provide, if possible, information on the beneficial actions taken to maintain or improve water quality conditions. As a Term of Clearance for the ICR for the current 305(b) and 303(d) programs covering the period March 1999 through April 2003, OMB has required that an estimate be made in this ICR of the burden that would be associated with all States estimating costs and benefits for achieving WQS. This ICR estimates the burden consistent with respondents' current practice, as well as the effort that would be consistent with applying the data and methodologies that have been developed for this purpose in

recent years. This ICR estimates the burden to the Agency of providing States with data, methods, templates and workshops for use in estimating costs and benefits (consistent with Section 305(b)(1)(D)), and the burden to States of applying this guidance to improve their estimates.

This ICR does not include the reduction in respondent burden resulting from the final regulations' adoption of a 4-year 303(d) listing cycle instead of the current 2-year 303(d) listing cycle because the savings (although substantial over time) would likely not be realized for the period covered by this ICR.

4. THE INFORMATION COLLECTED -- AGENCY ACTIVITIES, COLLECTION METHODOLOGY, AND INFORMATION MANAGEMENT

4(a) AGENCY ACTIVITIES

The Agency's burden for the current TMDL program and for the revised regulations has already been included in the current approved ICR for the period March 1999 to April 2003. With regard to 303(d) listings: EPA must review and approve or disapprove each State list of waters not meeting standards after the application of technology-based controls and the State's priority ranking; EPA must also review the State's listing methodology, and act on a State list submission within 30 days – if EPA disapproves a State list, it has 30 days to establish the list for the State. With regard to TMDL submitted to EPA for approval: EPA must review and act on the TMDL submissions within 30 days of the State submission and, if it disapproves a State TMDL, EPA must issue a TMDL for the State within 30 days of its disapproval.

In conformance with OMB's Terms of Clearance for the current approved ICR, this ICR includes the additional burden to the Agency associated with developing guidance for States to use in estimating for their 305(b) biennial water quality reports, the benefits and economic and social costs of achieving the CWA goals in the State.

This ICR does not include the reduction in the Agency's burden resulting from the final regulations' adoption of a 4-year 303(d) listing cycle instead of the current 2-year 303(d) listing cycle because the savings (although substantial over time) would likely not be realized for the period covered by this ICR.

4(b) COLLECTION METHODOLOGY AND MANAGEMENT

The States submit the Section 303(d) lists and priority rankings to the EPA Regions. The Regions review the State submissions and then issue a decision document approving or disapproving the State list. If EPA disapproves a State list, it must issue a public notice identifying the waters it is proposing to add to the State list. The final revisions would require the States to also submit TMDL development schedules to EPA along with the lists and priority rankings. Under the final revisions, State submission of listing methodologies would occur two years prior to the deadline for submission of the list. States must submit each completed TMDL to the EPA Regions for review and action. If EPA disapproves the State submission, it must establish the TMDL for the State.

The States submit copes if their final 305(b) reports to their Regional 305(b) Coordinators, who forwards them to Headquarters. States also submit their use support information (and 303(d) lists) in WBS compatible format. EPA developed the WBS to reduce the State burden associated with summarizing use support information and to automate national summaries needed to prepare the Report to Congress.

4(c) SMALL ENTITY FLEXIBILITY

This section is not applicable because the respondents are States and Territories which are not small businesses or organizations as defined by the Regulatory Flexibility Act, 5 U.S.C. Sections 601 (3) and (4).

4(d) COLLECTION SCHEDULE

Prior to the revised regulations, States were required to submit Section 303(d) lists (including the State listing methodology and priority ranking and targeting) to EPA on April 1 of even-numbered years. The final revisions would require States to submit 303(d) lists on April 1 every 4 years starting in 2002, but the listing methodology must be submitted to EPA for review by April 1 two years prior to submission of the listing – however, for the list due by April 1, 2002, the listing methodology must be submitted by May 1, 2001.

Under the proposed revisions, States would be required to develop TMDLs consistent with the State schedule and submit the TMDLs to EPA for review and approval/disapproval action.

The schedule for 305(b) submissions remains the same as in the currently approved ICR for March 1999 to April 2003. The improved analyses of the benefits and costs of attaining water quality standards should be included in the 305(b) reports for 2002.

5. NONDUPLICATION, CONSULTATIONS. AND OTHER COLLECTION CRITERIA

5(a) NONDUPLICATION

The Section 303(d) lists are the only State-by-State public accounting and ranking of waterbodies not meeting water quality standards after the application of technology-based controls. Under Section 303(d), States must submit the Section 303(d) lists to EPA for review and approval/disapproval action. TMDLs are a unique and valuable tool that quantifies the maximum amount of a pollutant that a waterbody can absorb and still meet water quality standards. They specify the amount that pollutant loadings need to be reduced for the waterbody to attain water quality standards and allocate pollutant load reductions among sources in a watershed. Section 303(d) also requires EPA to review and approve or disapprove State-submitted TMDLs.

The State 305(b) reports are the only direct vehicle for transmitting water quality information between States and EPA, or information about the benefits and costs associated with achieving water quality. Without the State 305(b) reports, EPA could not report to Congress on national attainment of beneficial uses, as required by the CWA

5(b) PUBLIC NOTICE REQUIRED PRIOR TO ICR SUBMISSION TO OMB

This is a revision of an existing ICR for a proposed rulemaking. In compliance with the 1995 Paperwork Reduction Act (PRA), EPA will solicit comments on the proposed rulemaking and the burden associated with the rule's information collection requirements during the normal public comment period.

5(c) CONSULTATIONS

Before beginning to develop the proposed revisions to the regulations, EPA convened a Federal Advisory Committee to make recommendations for improving the efficiency and effectiveness of listing and TMDL development. The TMDL FACA Committee was composed of 20 members with diverse backgrounds, including State and local government, industry, agriculture, forestry, and environmental advocacy. Over one and one-half years, the TMDL FACA Committee held six meetings at locations throughout the country. These meetings were open to the public and most included public comment sessions. The TMDL FACA Committee focused its deliberations on four broad issue areas: identification and listing of waterbodies; development and approval of TMDLs; EPA management and oversight; and science and tools. On July 28, 1998, the TMDL FACA Committee submitted its final report to EPA containing more than 100 consensus recommendations for changes and improvements to listing and TMDL development. EPA carefully reviewed the TMDL FACA Committee's consensus recommendations and incorporated, in whole or in part, many of those recommendations into the proposed revisions.

EPA has received numerous comments on the proposed revisions to the Water Quality Planning and Management Regulation and has given these careful consideration. This ICR fully reflects the final revisions to the rule. In addition, this ICR also reflects public comment on the proposed ICR (approved for March 1999 to April 2003) by including an estimate of the burden to States for preparing analyses of the benefits and costs of attaining WQS as required under section 305(b).

5(d) EFFECTS OF LESS FREQUENT COLLECTION

As indicated earlier, the final revisions change the two-year listing cycle to a four-year listing cycle, resulting in substantial reductions in burden over time to both States and the Agency. However, these are not reflected in this ICR, because savings will not accrue during the period covered by this ICR.

5(e) GENERAL GUIDELINES

The proposed activities (i.e., submission by the States and review by EPA of Section 303(d) lists and TMDLs) do not include any information collection activities that exceed the Paperwork Reduction Act-imposed guidelines contained in 5 CFR 1320.6.

- Information is not collected more often than quarterly.
- Responses are not required in less than 30 days.
- Respondents are not required to submit more than one original and two copies of any document.
- The collection does not provide for renumeration of respondents.
- The collection does not require records to be kept for more than three years.
- The collection is not in conjunction with a statistical survey.
- Provisions for small businesses and other small entities are appropriate.
- Confidentiality is protected.
- The collection does not require submission of information in a format other than that in which it is customarily maintained.

5(f) CONFIDENTIALITY AND SENSITIVE QUESTIONS

(i) Confidentiality

Information collected through the proposed activities is not confidential because all respondents are State agencies, Territorial agencies, and Tribes working entirely in a public forum.

(ii) Sensitive Questions

The proposed information collection activities do not request information of a sensitive nature from the State respondents.

6. ESTIMATING THE BURDEN AND COST OF THE COLLECTION

6(a) ESTIMATING RESPONDENT BURDEN

The respondent burden is calculated in Worksheet 1 (based on the more detailed information provided in Attachments A, B and C).

The average additional burden associated with the revised 303(d) rule requirements is estimated to be 6,497 hours per respondent, and the total annual burden for all 56 respondents is estimated to be 363,845 hours. This estimate does not include any of the savings that will accrue to respondents in future years resulting from the Agency's adoption of a 4-year 303(d) listing cycle instead of the current 2-year 303(d) listing cycle.

The average current burden associated with developing TMDLs under the current 303(d) program is estimated to be 68,577 hours per respondent, and the total annual burden for all 56 respondents is estimated to be 3,840,332 hours

The average current burden associated with developing benefit-cost information for the 305(b) biennial reports is estimated to be 45 hours, and the total annual burden for all 59 respondents is estimated to be 2,655 hours.

The average potential additional burden associated with developing improved benefit-cost information for the 305(b) biennial reports is estimated to be 621 hours per respondent, and the total annual potential additional burden for all 59 respondents is estimated to be 36,639 hours.

6(b) ESTIMATING RESPONDENT COSTS

Respondent costs are also calculated in Worksheet 1.

The average additional cost associated with the revised 303(d) rule requirements is estimated to be $252,676 per respondent, and the total annual cost for all 56 respondents is estimated to be $14,149,932. This estimate does not include any of the savings that will accrue to respondents in future years resulting from the Agency's adoption of a 4-year 303(d) listing cycle instead of the current 2-year 303(d) listing cycle.

The average current cost associated with developing TMDLs under the current 303(d) program is estimated to be $2,666,975 per respondent, and the total annual cost for all 56 respondents is estimated to be $149,350,512.

The average current cost associated with developing benefit-cost information for the 305(b) biennial reports is estimated to be $1,750, and the total annual cost for all 59 respondents is estimated to be $103,253.

The average potential additional cost associated with developing improved benefit-cost information for the 305(b) biennial reports is estimated to be $24,151 per respondent and the total annual potential additional cost for all 59 respondents is estimated to be $1,424,891.

6(c) ESTIMATING AGENCY BURDEN AND COST

Agency burden and costs for the current and revised 303(d) and 305(b) programs were included in the Agency's approved ICR Number 1560.05. The Agency's additional burden for preparing information and guidance for States to develop improved analyses of the benefits and costs of attaining water quality standards are estimated in Attachment B and summarized in Worksheet 2. The Agency's additional burden is estimated to be 2,323 hours annually over the period for this ICR representing an annual cost of $100,000.

6(d) BOTTOM LINE BURDEN HOURS AND COSTS / MASTER TABLE

(i) Respondent Tally (all respondents)

Total Annual Burden for the revised 303(d) rule	=	363,845hrs/yr
Total Annual Cost for the revised 303(d) rule	=	$14,149,932 /yr
Total Annual Burden for current program TMDL development	=	3,840,332 hrs/year
Total Annual Cost for the current program TMDL development	=	$149,350,512 /yr
Total Annual Burden for the current 305(b) BC Analysis	=	2,655 hrs/yr
Total Annual Cost for the current 305(b) BC Analysis	=	$103,253 /yr
Total Potential Annual Burden for new 305(b) BC Analysis	=	36,639 hrs/yr
Total Potential Annual Cost for new 305(b) BC Analysis	=	$1,424,891 /yr

(ii) Agency Tally

Total Annual Burden = 2,323 hours per year

Total Annual Costs = $100,000 per year

6(e) REASONS FOR CHANGE IN BURDEN

As explained above, EPA is finalizing revisions to the 303(d) regulations which would increase the burden to States for preparing 303(d) lists. EPA's recently approved request for information collection authority for the period March 1999 through April 2003 was based on the burden to States of the current 303(d) listing program and did not include consideration of the impact of the revised regulations (however, the additional burden to the Agency of the revised regulations was included).

In addition, previous ICRs did not include estimates for the burden associated with developing TMDLs. This ICR includes the additional burden that the revised regulation imposes regarding the development of TMDLs, as well as the burden under the current program associated with development of TMDLs.

Finally, this ICR also includes the additional burden in preparing biennial reports pursuant to 305(b) that would be associated with an increased effort by States (and the corresponding effort by the Agency) to provide estimates of the costs and benefits of achieving water quality standards.

The current program has always required the development of these estimates, but this ICR includes the burden that would be associated with States estimating costs and benefits in a manner that is consistent with the data and methodologies that have been developed for this purpose in recent years.

6(e)i. Increased Burden For 303(d) Listing

The Agency's report, Analysis of the Incremental Cost of Proposed Revisions To The TMDL Program Regulations (December 21, 1998), provided a detailed analysis and explanation of the additional burden to States that would result if the proposed revisions are promulgated. The Agency's revised analysis for the final revisions improves upon these estimates, reflecting the availability of additional data and more detailed analysis. As detailed in the final EA, for the listing-related requirements, States would bear a one-time transition cost that would be incurred for the 2002 listing, and a smaller ongoing cost for subsequent listings as follows:

Incremental Effort Per Respondent Per Listing Due to the Revised Regulations

Activity	Description of the Regulatory Revision Affecting the Burden to Respondents for this ICR	Change in Burden Per Respondent (hours)	
		2002 Listing	Subsequent Listings (2006, 2010, etc)
1	Revise the methodology for setting priorities	80	0
2	Prepare a schedule for developing TMDLs	8 - 16*	8
3	Additional public participation	480	80
4	Adopt new format for the listing methodology	40	0
	Total Additional Hours Per Listing:	612.6	108

*The burden ranges from 8 hours for the 24 States that already have schedules to 16 hours for the 32 States that don't already have schedules.

Over the 3-year period of this ICR, the 2002 listing will be submitted. The additional effort associated with subsequent listings will not occur until late 2003 (for the 2006 listing). Therefore, the only additional burden for this ICR will be for the 2002 listing, amounting to an average of 612.6 hours per respondent. To annualize this effort over the period of the ICR, we divide by three to get 204.2 hours per year.

This ICR does not include any allowance for the reduced burden associated with the revised regulation's adoption of a 4-year listing cycle instead of the current 2-year listing cycle – over time, the savings associated skipping a listing cycle every 2 years exceeds the additional burden from the other revisions that increase the burden of preparing 303(d) lists.

6(e)ii. Increased 303(d) Burden For Developing TMDLs

If all respondents develop TMDLs at a steady pace in accordance with the schedules they committed to in their 1998 303(d) lists, approximately 13,238 TMDLs would be developed over the period for this ICR, as estimated in Attachment A. This represents nearly 1/3 of the total

number of TMDLs that are expected to be developed for the impaired waterbodies identified in the 1998 303(d) lists. As shown in detail in Exhibit A-6b of Attachment A, the two additional TMDL development tasks (development of an implementation plan and written response to public comments) required by the revised regulation result in an average increased burden of 78 hours per TMDL, taking into consideration the extent that respondents would perform these tasks anyway in the absence of the revised requirements. While the number of TMDLs that are expected to be developed by different respondents varies widely over the period of this ICR, the average number of TMDLs across all respondents would be approximately 79 TMDLs per respondent per year representing an average annual burden of 6,293 hours per respondent per year.

6(e)iii. Current 303(d) Program Burden For Developing TMDLs

As shown in detail in Attachment A, the current program requires the development of TMDLs, generally requiring the completion of 7 tasks: watershed characterization, modeling and analysis, allocation analysis, development of the TMDL document for public review, public outreach, formal public participation and response, and contingency task covering planning, tracking, legal support, and extra outreach. As estimated in detail in Attachment A, the average burden associated with developing a TMDL is 870 hours. If all respondents develop TMDLs at a steady pace in accordance with the schedules they committed to in their 1998 303(d) lists, approximately 13,238 TMDLs would be developed over the period for this ICR, as estimated in Attachment A. While the number of TMDLs that are expected to be developed by different respondents varies widely over the period of this ICR, the average number of TMDLs across all respondents would be approximately 79 TMDLs per respondent per year representing an average annual burden of 68,577 hours per respondent per year.

6(e)iv. 305(b) Burden For Estimating the Costs and Benefits of Achieving WQS

The Agency will develop new detailed guidance, information and tools for States that will assist them in improving their benefit-cost analyses, while minimizing the additional cost of doing so. As shown in detail in Attachment B and summarized in Worksheet 1, the additional burden for States to apply the new guidance depends on the level of detail and sophistication that the States choose to provide as well as factors such as the number of impaired waterbodies in the State, the State's diversity of water resources, and the intensity of use of those resources. The additional cost to States of applying the new guidance is estimated to result in an average increase in State burden of 621 hours annually in addition to the estimated average current burden of 45 hours for the States' current efforts to prepare this information.

6(f) BURDEN STATEMENT

The projected average additional cost associated with the revised 303(d) rule requirements is estimated to be $252,677 per respondent, and the total annual cost for all 56 respondents is estimated to be $14,149,932 -- this estimate does not include any of the savings that will accrue to respondents in future years resulting from the Agency's adoption of a 4-year 303(d) listing cycle instead of the current 2-year 303(d) listing cycle. The average current cost associated with developing TMDLs under the current 303(d) program is estimated to be $2,666,973 per respondent, and the total annual cost for all 56 respondents is estimated to be $149,350,512. The average current cost associated with developing benefit-cost information for the 305(b) biennial reports is estimated to be $1,750, and the total annual cost for all 59 respondents is estimated to be

$103,253. The average potential additional cost associated with developing improved benefit-cost information for the 305(b) biennial reports is estimated to be $25,901 per respondent (depending on the level of detail and sophistication of the analyses), and the total annual potential additional cost for all 59 respondents is estimated to be $1,424,891. Overall, the burden associated with the new requirements amounts to a total of 400,484 hours at a cost of $15,574,823 and the burden associated with the current program requirements amounts to a total of 3,842,987 hours at a cost of $149,453,765. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An Agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 C.F.R. Part 9 and 48 C.F.R. Chapter 15.

Send comments on EPA's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, OP Regulatory Information Division; U.S. Environmental Protection Agency (2137); 401 M Street, S.W.; Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, N.W.; Washington, D.C. 20503, marked "Attention: Desk Officer for EPA." Include the ICR number in any correspondence.

PART B: COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

This section is not applicable because no statistical procedures are employed for the information collection.

Worksheet 1: Average Annual Burden and Cost Estimates for Respondents

Information Collection Activity	A Number of Respondents	B Ave Annual Burden Per Respondent (hours)	(A)x(B) = C Total Annual Respondent Burden (hours)	D Loaded Hourly Labor Cost[1] (2000 $)	(C)x(D) = E Annual Cost (2000 $)
Revised 303(d) Rule - new requirements:					
Requirements for listing[2]	56	204.2	11,435	$38.89	$444,707
Requirements for TMDL development[3]	56	6,293.0	352,410	$38.89	$13,705,225
Revised 303(d) Rule Annual Subtotal	**56**	**6,497.2**	**363,845**	**$38.89**	**$14,149,932**
Current 303(d) Rule TMDL Development[4]	**56**	**68,577.4**	**3,840,332**	**$38.89**	**$149,350,512**
TOTAL 303(d) BURDEN	**56**	**75,074.6**	**4,204,177**	**$38.89**	**$163,500,444**
305(b) benefit-cost analysis[5]					
Current practice	59	45	2,655	$38.89	$103,253
Improved BC analysis at the State level	59	621	36,639	$38.89	$1,424,891
TOTAL 305(B) BC ANALYSIS BURDEN	**59**	**666**	**39,294**	**$38.89**	**$1,528,144**
TOTAL BURDEN FOR THIS ICR	**---**	**75,741**	**4,243,471**	**$38.89**	**$165,028,588**

[1] Source: As explained in detail in Attachment C, the respondents' fully loaded labor rates are the "average" State fully loaded labor rates (March, 2000) estimated in the Gap Analysis Effort's State Water Quality Management Workload Model, which represent the consensus estimate of 18 States, 3 EPA regions, 8 Associations, and included input from an additional 14 States. This fully loaded hourly labor rate represents the total cost for obtaining an hour's worth of work, and includes: direct salary paid, paid or accrued vacation, paid or accrued sick leave, cost of other fringe benefits (e.g., health, pension, etc.), general training, indirect expenses such as professional support (e.g., clerical, accounting, supervisory, etc.), office space, utilities, telephone service, equipment (e.g., fax machines, basic computing needs such as hardware and software, etc.), etc.. This rate does not include the costs associated with computer maintenance, support or periodic upgrades of hardware or software.

[2] Source: See the summary table in 6(e)i.

[3] Source: See the detailed discussion in Attachment A and the summary in 6(e)ii.

[4] Source: See the detailed discussion in Attachment A and the summary in 6(e)iii.

[5] Source: See the detailed discussion in Attachment B and the summary in 6(e)iv.

Worksheet 2: Annual Agency Burden and Cost Estimates

Information Collection Activity	A Total Annual Burden (hours)	B Loaded Hourly Labor Cost[1] (2000 $)	(A)x(B) = C Annual Cost (2000 $)
Revised 303(d) Rule - current & new requirements	NA[2]		Not Applicable[2]
305(b) benefit-cost analysis guidance[3]			
Current review and revision of guidance[4]	NA[2]	$43.05	Not Applicable[2]
Development of additional guidance for States[5]	2,323	$43.05	$100,000
TOTAL 305(b) BC ANALYSIS GUIDANCE	**2,323**	**$43.05**	**$100,000**

[1] Source: As explained in detail in Attachment C, the Agency's fully loaded labor rates are based on the current salary rate of a Federal Grade 10 Step 7 and an overhead rate of 110%, as used in all the previous ICRs for the 305(b) and 303(d) programs.

[2] The Agency's burden for both the current 303(d) and 305(b) programs and the revised 303(d) requirements were already included in the recently approved ICR Number 1560.05, approved April 5, 2000.

[3] Estimates are discussed in detail in Attachment B.

[4] Routine review and revision of guidance regarding benefit-cost analysis for 305(b).

[5] The cost of the Agency's additional burden to develop new guidance that would minimize the additional efforts required by States to improve their estimates of the benefits and costs of achieving WQS is estimated at approximately $300,000 which would be incurred during 2000 and 2001. Over the 3-year period of this ICR, the annual cost would be $100,000 which translates into a burden of 2,323 hours annually.

ATTACHMENT A

303(d): Hours Burden for Developing TMDLs

THE HOURS BURDEN FOR DEVELOPING TMDLS

This Attachment provides the basis for estimating the burden associated with the current 303(d) program's requirement for developing TMDLs, as well as the added burden associated with the revised rules additional requirements. The discussion is organized as follows:

A. Tasks for developing TMDLs

B. Overview of approach and sources for estimates

C. Unit burden estimates for individual tasks

D. Number of TMDLs to be developed and their characteristics

E. Total burden for developing TMDLs

A. Tasks for Developing TMDLs

EPA is in the process of estimating the States' total program burden for developing TMDLs[1] (the "TMDL Development Cost Analysis"). The methodology for the TMDL Development Cost analysis was developed in consultation with State, EPA and contractor representatives and was validated by comparing the resulting estimated costs with the known actual costs for 131 TMDLs. The tasks that were identified for developing TMDLs represent the full range of activities needed for the current program[2]:

1. Watershed characterization,

2. Modeling and analysis,

3. Allocation analysis,

4. Development of TMDL document for public review,

5. Public outreach,

6. Formal public participation and response

7. Contingency for planning, tracking, legal support, extra outreach, etc.

[1]Environomics and Tetra Tech, Inc., *Estimate of the National Cost to Develop TMDLs*, prepared for the U.S. EPA, Office of Wetland, Oceans and Watersheds. In preparation.

[2]This does not include costs for monitoring before, during or after the TMDL development process. It is assumed that the TMDL is developed using available data or that the State will identify monitoring needs to support TMDL development to be collected under other program activities (i.e., statewide monitoring, 106). The cost to States of implementing TMDLs is also not included.

EPA's Economic Analysis of the final rule[3] (the "EA") estimates the burden associated with the additional tasks required by the revised Water Quality Planning and Management regulations:

a. Development of an implementation plan

b. Written response to public comments.

This ICR draws upon both studies (the TMDL Development Cost Analysis and the EA) to develop the respondents' burden estimates for this ICR for developing TMDLs under the current program and the additional burden associated with the revised rule.

B. Overview of Approach and Sources for Estimates

1. Estimating Unit Costs

The approach developed in the TMDL Development Cost Analysis is used in this ICR to estimate the additional cost associated with the new provisions that affect the cost of developing TMDLs. There are two key considerations to accurately estimating the unit costs for any task associated with developing TMDLs:

- unit costs can vary widely across TMDLs, and
- there are efficiencies associated with developing multiple TMDLs at once.

Each of these is discussed below.

a. Wide variability in unit costs

For this analysis, estimates of unit costs are based upon the judgment of State and contractor personnel that are familiar with the tasks involved. However, it can be difficult to estimate an "average" cost for any given TMDL development task, because the effort associated with developing a TMDL can span a large range for a number of reasons, including: the size of the geographic area and type of waterbody, the number and type of sources, the types of pollutants, the sophistication of the modeling and analysis tools, the level of public interest, etc. Rather than attempt to estimate an appropriate "average"that takes all of this into account, it is, it is easier to develop more accurate estimates of typical unit costs for three categories of TMDLs representing three levels of difficulty:

- Level 1 represents relatively simple TMDLs with limited public interest,
- Level 2 represents mid-range TMDLs, and
- Level 3 represents TMDLs requiring detailed and sophisticated analysis as well as being the subject of greater public interest.

[3]Environomics, *Analysis of the Incremental Cost of Final Revisions to the Water Quality Planning and Management Regulation and the National Pollution Discharge Elimination System Program*, prepared for the U.S. EPA, Office of Wetland, Oceans and Watersheds, In preparation.

This approach facilitates developing more accurate estimates, communication of the estimates, and their validation. The approach of categorizing TMDLs by three levels of difficulty was also adopted by the Gap Water Quality Management Workload Model[4] for its TMDL workload module.

Using this approach requires that three unit cost estimates be developed for any task. In addition, it is necessary to estimate the portion of TMDL workload that is represented by each level.

b. Efficiencies associated with developing multiple TMDLs at once

States can reduce the cost of developing TMDLs by logically grouping TMDLs. In some cases, savings result because a task can be performed at the same time for all of the TMDLs, while in other cases savings result because the work performed for the first TMDL (or waterbody) can be applied to subsequent TMDLs (or waterbodies). When estimating the cost associated with the revisions affecting TMDL development, we included consideration of three specific types of cost efficiencies:

- *Submissions with multiple TMDLs involving more than one waterbody*. Increasingly, States are using a watershed approach to developing TMDLs in which TMDLs for logical groupings of waterbodies are clustered together into a single submission. To estimate this efficiency, we assume that there are no efficiencies for the first waterbody in a clustered submission, but that there are efficiencies for the remaining waterbodies in a clustered submission. Examples of tasks that would experience efficiencies include holding a joint public hearing and reusing parts of the TMDL document (or providing a single submission).

- *Submissions for a single waterbody involving multiple TMDLs.* For the impaired waterbodies identified in the 1998 303(d) lists, about 42% require the development of multiple TMDLs. Increasingly, States are also developing together all of the TMDLs for waterbodies that require more than one TMDL. To estimate this efficiency, we assume that there are no efficiencies for the first TMDL in a clustered submission, but that there are efficiencies for the remaining TMDLs for the waterbody. Examples of tasks that would experience efficiencies include holding a joint public hearing and reusing parts of the TMDL document (or providing a single submission for all of the TMDLs).

- *Multiple TMDLs for a waterbody involving related pollutants*. Further efficiencies are realized when modeling multiple metals or multiple nutrients since similar models, analytical techniques and chemical processes are considered. Once the analysis has been performed for the first metal (or the first nutrient), the additional effort to perform the analysis for additional metals (or nutrients) is only a fraction of the initial effort. We assume that there are no efficiencies for the first metal or nutrient TMDL, but that there would be efficiencies for the modeling, analysis and allocation tasks for subsequent metal or nutrient TMDLs.

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[4]The Agency's Gap Analysis Effort, which developed the Water Quality Management Workload Model (version 3.0, March 2000) is the result of a joint effort by EPA, States and other interested stakeholders to develop a tool for estimating the State's resource needs for State water quality management programs. The Gap Model is designed to allow States to enter the specifics of their own circumstances, but includes "defaults" for all estimates that were judged to be representative of the "average," "median," or "typical" State. The Gap defaults were based on the consensus of a focus group of participants including representatives from 18 States, 3 EPA regions, 8 associations, and included consideration of comments from an additional 14 States. However, the Gap model does not take efficiencies into account, which can represent significant savings in the cost of developing TMDLs.

All of these types of efficiencies would apply to the additional tasks for TMDL development required in the revised rule, as well as to the tasks that are already required for TMDL development in the current program. Information regarding the extent to which efficiencies might occur and their magnitude is provided in the forthcoming EA as well as the forthcoming TMDL Development Cost Analysis.

2. Estimating the extent to which current practice already meets these requirements

To determine the additional burden that results from the revised regulations (or the requirements of the current program), it is necessary to estimate the extent to which current practice already meets these requirements. This was estimated in the EA for the final rule based on a sample of 466 approved or recently submitted TMDLs. For these TMDLs, about 22.6% of the cost of these new requirements were met anyway even in the absence of the revised rule. Therefore, it is reasonable and appropriate to attribute 77.4% of the cost of these requirements to the final revisions (to reflect the fact that some States would meet these requirements to varying degrees even if the new provisions were not issued), as was done in the Agency's analysis of the final rule.

3. Estimating the resulting national cost.

A key input are the nine unit costs (i.e., cost per TMDL) for each task associated with developing a TMDL. The nine unit costs represent different combinations of the 3 Levels of difficulty and the 3 types of efficiencies. The EA for the final rule provides the unit costs for the 2 new TMDL development requirements, while the TMDL Development Cost Analysis provides the unit costs for the 7 TMDL development tasks of the current program. These unit costs in combination the expected number of TMDLs to be developed over the period covered by this ICR provides the basis for estimating the respondent burden. These are summarized next.

C. Unit Burden Estimates For Individual Tasks

1. The Unit Burden When There Are No Efficiencies

From the TMDL Development Cost Analysis, the unit costs for the 7 tasks for TMDL Development under the current program, assuming no efficiencies whatsoever, are shown on the next page in Exhibit A-1a, the additional 2 tasks required by the revised rule are shown in Exhibit A-1b, and the combined burden is shown in Exhibit A-1c. These unit costs apply to the first TMDL for a waterbody that has not been clustered with other waterbodies.

The estimates shown in Exhibit A-1c compare closely with the default estimates in the Gap State Water Quality Workload Model for the cost of "typical" Level 1, 2 and 3 TMDLs (although the individual tasks are grouped and defined differently, both this ICR and the Gap model cover the same full range of activities needed to develop TMDLs): the ICR's estimate for Level 1 is 16% higher than the Gap default, the ICR's estimate for Level 2 is the same as the Gap default, and the ICR's estimate for Level 3 is within 2% of the Gap default. However, the Gap Model does not include the significant efficiencies that can be achieved by clustering multiple TMDLs as described earlier. The efficiencies for the tasks associated with the current program are estimated and verified in the TMDL Development Cost Analysis, and the efficiencies for the additional tasks associated with the revised rule are estimated in the EA as summarized next.

Exhibit A-1a
Hours of Effort for the Current Program to Develop a TMDL at 3 Levels of Difficulty

Task	Level 1		Level 2		Level 3	
	Low	High	Low	High	Low	High
1. Watershed Characterization	160	200	200	240	240	320
2. Modeling and Analysis	24	80	80	480	480	960
3. Allocation Analysis	8	40	40	80	80	120
4. Develop TMDL Doc for Public Review	160	240	240	480	480	640
5. Public Outreach	160	240	240	320	320	480
6. Formal public participation/response	40	80	80	240	240	480
7. Tracking, planning, legal support, etc.	84	160	160	316	316	514
Subtotal for Range	636	1,040	1,040	2,156	2,156	3,514
Subtotal for Average	838		1,598		2,835	

Exhibit A-1b
Hours of Effort for the New Tasks to Develop a TMDL at 3 Levels of Difficulty

Task	Level 1		Level 2		Level 3	
	Low	High	Low	High	Low	High
a. Development of an implementation plan	20	120	120	160	160	240
b. Written response to public comments	10	40	40	80	80	200
Subtotal for Range	30	160	160	240	240	440
Subtotal for Average	95		200		340	

Exhibit A-1c
Combined Hours of Effort for All Tasks to Develop a TMDL at 3 Levels of Difficulty

Task	Level 1		Level 2		Level 3	
	Low	High	Low	High	Low	High
I. Current Program Tasks	636	1,040	1,040	2,156	2,156	3,514
II. New Tasks	30	160	160	240	240	440
Subtotal for Range	666	1,200	1,200	2,396	2,396	3,954
Subtotal for Average	933		1,798		3,175	

2. Efficiencies Associated With Developing Multiple TMDLs At Once

Exhibit A-2 summarizes the efficiencies that are estimated in the TMDL Development Cost Analysis and the EA for all of the TMDL development tasks:

Exhibit A-2
Incremental Unit Costs of Successive TMDLs for Waterbodies where Efficiencies Exist

Tasks		% of Unit Cost of Initial TMDL	
		Multiple Waterbodies or Multiple TMDLs for a Waterbody	**Multiple Metals or Nutrients for Multiple TMDLs for a Waterbody**
current program	1. watershed characterization	25%	25%
	2. modeling & analysis	100%	25%
	3. allocation analysis	100%	25%
	4. develop TMDL document	25%	25%
	5. public outreach	25%	25%
	6. formal public participation	25%	25%
	7. tracking, planning, etc	25%	25%
new requirements	a. implementation plan	50%	15%
	b. written response to comments	25%	25%

Using the implementation plan task as an example, if 3 TMDLs are developed for a waterbody, the first TMDL bears the full cost of the preparation of the implementation plan, but the cost for each of the next two implementation plans is 50% of the full cost. The resulting total cost is equivalent to the cost of 2 plans (100% + 50% +50%) instead of 3 plans, and the resulting savings overall for preparing implementation plans for all of the TMDLs for the waterbody in this example is 33%. If the 3 TMDLs were for one nutrient and two metals, there would be further efficiencies associated with the second metal, and the resulting total cost would be equivalent to 1.65 plans (100% + 50% + 15%), with a resulting overall savings of 45%.

3. Resulting Unit Burden Taking Efficiencies Into Account

Exhibits A-3a through A-3d on the next page show the resulting burden for the tasks associated with the current TMDL program, taking different types of efficiencies into account. Exhibit A-4a through A-4d that follows show the resulting burden for the new tasks associated with the revised regulations, taking different types of efficiencies into account.

Exhibit A-3a
Current Program: Unit Costs to Develop a TMDL for a Single Waterbody with 1 Cause

% Effort	Cost Component	Level 1 (hrs)	Level 2 (hrs)	Level 3 (hrs)
100%	modeling & analysis, and allocation	76	340	820
100%	all remaining tasks	762	1,258	2,015
	Total	838	1,598	2,835

Exhibit A-3b
Current Program: Unit Costs to Develop TMDLs for Additional Clustered Waterbodies or Causes

% Effort	Cost Component	Level 1 (hrs)	Level 2 (hrs)	Level 3 (hrs)
100%	modeling & analysis, and allocation	76	340	820
25%	all remaining tasks	191	315	504
	Total	267	655	1,324

Exhibit A-3c
Current Program: Unit Costs to Develop TMDLs for Additional Related Causes (Multiple Metals or Combinations of Nutrients/BOD/DO/Ammonia)

% Effort	Cost Component	Level 1 (hrs)	Level 2 (hrs)	Level 3 (hrs)
25%	modeling & analysis, and allocation	19	85	205
25%	all remaining tasks	191	315	504
	Total	210	400	709

Exhibit A-3d
Current Program: Summary of Unit Costs to Develop TMDLs Taking Efficiencies Into Account

Extent to Which Efficiencies Are Realized	Level 1 (hrs)	Level 2 (hrs)	Level 3 (hrs)
A. TMDLs requiring full cost – the only cause or the first cause	838	1,598	2,835
B. TMDLs at partial cost – multiple causes for a water or clustered waters	267	655	1,324
C. TMDLs with additional modeling efficiencies for related pollutants	210	400	709

Exhibit A-4a
New Requirements: Unit Costs to Develop a TMDL for a Single Waterbody with 1 Cause

% Effort	Cost Component	Level 1 (hrs)	Level 2 (hrs)	Level 3 (hrs)
100%	implementation plan	70	140	200
100%	written response to public comments	25	60	140
	Total	95	200	340

Exhibit A-4b
New Requirements: Unit Costs to Develop TMDLs for Additional Clustered Waterbodies or Causes

% Effort	Cost Component	Level 1 (hrs)	Level 2 (hrs)	Level 3 (hrs)
50%	implementation plan	35	70	100
25%	written response to public comments	6	15	35
	Total	41	85	135

Exhibit A-4c
New Requirements: Unit Costs to Develop TMDLs for Additional Related Causes (Multiple Metals or Combinations of Nutrients/BOD/DO/Ammonia)

% Effort	Cost Component	Level 1 (hrs)	Level 2 (hrs)	Level 3 (hrs)
15%	implementation plan	11	21	30
25%	written response to public comments	6	15	35
	Total	17	36	65

Exhibit A-4d
New Requirements: Summary of Unit Costs to Develop TMDLs Taking Efficiencies Into Account

Extent to Which Efficiencies Are Realized	Level 1 (hrs)	Level 2 (hrs)	Level 3 (hrs)
A. TMDLs requiring full cost – the only cause or the first cause	95	200	340
B. TMDLs at partial cost – multiple causes for a water or clustered waters	41	85	135
C. TMDLs with additional modeling efficiencies for related pollutants	17	36	65

Following are several examples of how these costs would apply to different situations. To simplify comparison among these examples, all of them are for Level 2 TMDLs only, and they only involve the cost of the new requirements as summarized in Exhibit A-4d:

- *Single Level 2 TMDL.*
  The combined effort would be 200 hours as shown in Exhibit A-4d.

- *A cluster of 5 waterbodies, each with a single Level 2 TMDL.*
  The combined effort would be 540 hours (200 + 4 x 85).

- *A cluster of 2 waterbodies: one waterbody with 3 Level 2 TMDLs and one waterbody with 2 Level 2 TMDLs, no modeling efficiencies.*
  The combined effort would be 540 hours (200 + 4 x 85).

- *A cluster for 1 waterbody with 5 Level 2 TMDLs, no modeling efficiencies.*
  The combined effort would be 540 hours (200 + 4 x 85).

- *A cluster for 1 waterbody with 5 Level 2 TMDLs, all for metals (or all for nutrients) with modeling efficiencies.*
  The combined effort would be 344 hours (200 + 4 x 36).

- *A cluster for 1 waterbody with 5 Level 2 TMDLs, composed of 1 pollutant with no efficiencies, 2 metals with efficiencies, and 2 nutrients with efficiencies.*
  The combined effort would be 442 hours (200 + 85 + 36 + 85 + 36).

In order to apply the unit costs for the current program from Exhibit A-3d and for the new requirements from Exhibit A-4d, we need to estimate the total number of TMDLs that will be developed in each of the nine combinations of complexity and efficiency.

D. Number of TMDLs To Be Developed and Their Characteristics

Based on a detailed analysis of 1998 303(d) data base, the EA estimates the pace and characteristics of the TMDL workload associated with the causes of impairment identified in the 1998 303(d) lists. If States meet the schedules they committed to in their 1998 303(d) submissions by developing TMDLs uniformly over the course of their schedules, then over the period of this ICR (the second half of 2000, all of 2001 and 2002, and the first half of 2003), States may complete an estimated 13,238 TMDLs, representing an average of 78.8 TMDLs per State per year. The distribution of these TMDLs among the different combinations of complexity and efficiency, as estimated in the EA, are summarized in Exhibit A-5:

Exhibit A-5
Total Number of TMDLs Scheduled for Submission from July 2000 to June 2003

Extent to Which Efficiencies Are Realized	Total	Level 1	Level 2	Level 3
A. TMDLs requiring full cost – the only cause or the first cause	3,583	1,615	1,074	894
B. TMDLs at partial cost – multiple causes for a water or clustered waters	8,343	3,757	2,502	2,084
C. TMDLs with additional modeling efficiencies for related pollutants	1,312	586	395	331
Total	13,238	5,958	3,971	3,309

E. Total Burden for Developing TMDLs

Combining the number of TMDLs in Exhibit A-5 with the unit burdens for the current program requirements for developing TMDLs in Exhibit A-3d results in the total burden associated with the current program of 11,520,996 hours (averaging 68,577 hours per respondent per year) as shown in Exhibit A-6a:

Exhibit A-6a
Current Program: Total Hours Burden for Developing TMDLs July 2000 to June 2003

Extent to Which Efficiencies Are Realized	Total	Level 1	Level 2	Level 3
A. TMDLs requiring full cost – the only cause or the first cause	5,604,112	1353370	1716252	2534490
B. TMDLs at partial cost – multiple causes for a water or clustered waters	5,401,145	1003119	1638810	2759216
C. TMDLs with additional modeling efficiencies for related pollutants	515,739	123060	158000	234679
Total	11,520,996	2479549	3513062	5528385

Combining the number of TMDLs in Exhibit A-5 with the unit burdens for the new program requirements for developing TMDLs in Exhibit A-4d results in the total burden of 1,365,929 hours as shown in Exhibit A-6b. However, this does not yet reflect the extent to which States currently meet some of these requirements already and therefore are not considered a burden attributable to the revised rule. As analyzed in detail in the EA, States already currently incur approximately 22.6 % of the effort associated with these requirements, and therefore this burden is not attributable to the revised rule. As shown in Exhibit A-6b, the additional burden associated with the new requirements is 1,057,229 hours, averaging 6,293 hours per respondent per year.

Exhibit A-6b
New Requirements: Total Hours Burden for Developing TMDLs July 2000 to June 2003

Extent to Which Efficiencies Are Realized	Total	Level 1	Level 2	Level 3
A. TMDLs requiring full cost – the only cause or the first cause	672,185	153,425	214,800	303,960
B. TMDLs at partial cost – multiple causes for a water or clustered waters	648,047	154,037	212,670	281,340
C. TMDLs with additional modeling efficiencies for related pollutants	45,697	9,962	14,220	21,515
subTotal	1,365,929	317,424	441,690	606,815
less the extent to which this burden would be incurred in the absence of the new requirements	(308,700)			
Total	1,057,229			

ATTACHMENT B

305(b): Hours Burden for Analysis of Benefits and Costs of Attaining WQS

HOURS BURDEN FOR ANALYSIS OF BENEFITS AND COSTS OF ATTAINING WQS

Section 305(b)(1)(D) of the CWA requires States in their biennial water quality assessment to estimate the benefits and costs of achieving water quality standards by estimating:

> "i. the environmental impact,
>
> ii. the economic and social costs necessary to achieve the objective of this Act in such State,
>
> iii. the economic and social benefits of such achievement and
>
> iv. an estimate of the date of such achievement."

In previous ICRs, EPA recognized that this information may not be readily available due to the complexities of the analyses involved. Therefore, respondents provide information (to the extent possible) on the costs of pollution control activities, capital investment in municipal and industrial facilities (including the cost of operating these facilities), and the costs of administering State and local water pollution control activities. Respondents also provide, if possible, information on the beneficial actions take to maintain or improve water quality conditions. States have provided varying degrees of information in their biennial reports regarding the costs and benefits of achieving WQS.

As a Term of Clearance for the ICR for the current 305(b) and 303(d) programs covering the period March, 1999 through April 2003 (ICR Number 1560.05), OMB has required that an estimate be made in this ICR of the burden associated with estimating benefits and costs assuming that the Agency would provide additional guidance to States to assist them in preparing the analyses. Therefore, this ICR estimates the burden that would be associated with a more significant activity than EPA has previously expected or that States have previously provided.

The Agency will develop guidance to assist States to develop better and more comprehensive estimates of the benefits and costs of attaining water quality standards (BC Analysis). The bulk of the effort required for both the Agency and for the States generally occurs for the next biennial report required in 2002. Thereafter, the effort required to update this information for future biennial reports may be only 25% of the effort associated with initially developing this information for the 2002 report.

A. Guidance to be Developed by the Agency

The Agency will develop guidance for the States that will assist them in improving their BC Analyses, while minimizing the additional burden of doing so. The Agency plans to target the guidance so that can be applied by a mid-level analyst (consistent with the fully loaded hourly rates in Attachment C).

The guidance for performing benefits analysis will likely:

- include a list of data elements required to conduct a benefits analysis, and include suggested sources and techniques for each,
- present the results of a meta-analysis of existing valuation studies, with recommended values for different water body types, expected changes in water quality, and categories of benefits,

- discuss how and when to apply different values, will provide default values where there is no basis or need to tailor the estimates to location-specific characteristics, and will describe circumstances in which it is important to develop location-specific estimates, and

- include a user-friendly spreadsheet model that implements the proffered analysis, and makes it easy to substitute use-selected values to tailor the model to specific States and to conduct sensitivity analyses to address key uncertainties.

The guidance for preparing cost analysis will provide information regarding cost, including data sources, default values and worksheets.

The Agency anticipates that States will have the opportunity to participate in the review of draft guidance materials to help ensure that the guidance and the tools it provides are useful and practical from the States' perspective. If appropriate, the Agency may provide additional training materials and/or workshops to further assist States in using the guidance.

The Agency estimates that the cost of providing this additional guidance would be $300,000. Over the three year period of the ICR, the annual cost would be $100,000 which translates into a burden of 2,323 hours annually (at the fully loaded hourly rate of $43.05 as discussed in Attachment C).

B. State Burden Associated with Applying the New Guidance

The new guidance will assist States in preparing improved BC Analyses for their States.

The effort for benefits analysis for specific States depends on several factors, including the number of impaired waterbodies, differences in the physical characteristics of these waterbodies, differences in aquatic habitat types, designated uses, and recreational importance as well the quality of existing information about these waterbodies. For a small state with a small number of the 303(d) listed waters, low intensity of water-based recreation, and nonexistent or negligible commercial fishing/shell fishing, the cost of benefits assessment at the state and watershed levels may not be very different. States with diverse water resources and intensive uses of these resources (i.e., intensive water-based recreation) such as coastal states are likely to incur larger costs due to complexity of the benefits analysis. The level of effort associated with developing estimates at the State level of the benefits of attaining WQS are detailed in Exhibit B-1 on the next page. As shown in the exhibit, the Agency estimates that the range the burden associated with estimating benefits at the State level ranges from 432 to 1,224 hours. Whether States undertake Level 1, 2 or 3 analyses depends on the State policy and on the complexity of the State's watershed situations. Most coastal watersheds and those Great Lakes watersheds would be more likely to involve Level 3 analyses, while inland watersheds would be more likely to be adequately addressed by Level 1 and 2 analyses.

We assume for this ICR that States will undertake efforts to estimate costs that are similar to the efforts that they apply to estimate benefits, amounting to an additional 432 to 1,224 hours.

Therefore, the total burden per State associated is estimated to range from 864 to 2448 hours for the 2002 biennial report. For the period of this ICR, we assume that half the effort for preparing this information for the 2004 biennial report also is incurred – however, the effort to update the 2002 report is estimated to be an additional 25%, so that half of this effort amounts to 108 to 306 hours. Therefore, the total effort over the period of this ICR ranges from 972 to 2,754 hours per State. Annualizing over the three years results in 324 to 918 hours annually per State. To estimate the national cost, we assume that the average for the range

represents the typical level of analysis across all the 59 governmental units for the purpose of estimating a national burden, resulting in an average annual burden of 621 hours.

For perspective, the Agency's estimate (in the approved ICR) for the average State's total annual effort for 305(b) is 3,937 hours (including planning, data collection, data entry, conducting assessments, public participation, preparing the biennial report, etc), so that including a more comprehensive BC Analysis at the State level roughly increases the average State's total 305(b) burden by 16%.

Exhibit B-1
Hours of Effort to Estimate at the State Level
the Benefits of Attaining WQS at 3 Levels of Difficulty

Task	Level 1		Level 2		Level 3	
	Low	High	Low	High	Low	High
1. Characterize affected watersheds	96	120	128	144	160	192
2. Water quality modeling and analysis	64	80	96	112	128	144
3. Assess ecological improvements	32	48	56	64	64	72
Assess recreational improvements	32	40	56	64	72	88
Assess changes in nearby property values	16	24	32	40	48	56
Assess avoided cost of water treatment	24	32	48	64	64	80
Assess other economic productivity benefits	24	32	40	48	40	48
Assess human health benefits	16	24	32	40	40	48
4. Calibrate to local conditions*	---	---	---	---	160	192
5. Report writing	72	80	88	96	120	144
6. Contingency @ 15% **	56	72	88	104	136	160
Subtotal for Range	432	552	664	776	1,032	1,224
Subtotal for Average	492		720		1,128	

**interviews or pilot studies **Provision for additional data collection, analysis, review, etc.*

ATTACHMENT C

Fully Loaded Hourly Labor Rates

FULLY LOADED HOURLY LABOR RATES

The federal and State fully loaded labor rates for the year 2000 used in this analysis were derived from:

1) the fully loaded State and federal labor rates used in previously approved and draft Information Collection Requests (ICRs) for the 303(d) and 305(b) programs, and

2) estimates from the Gap Analysis Effort for the "average," "median" or "typical" fully loaded State labor rates developed in the State Water Quality Management Workload Model (ver 3.0, March 2000)[5]. This model is the result of a joint effort by EPA, States and other interested stakeholders to develop a tool for estimating the States' resource needs for State water quality management programs. The Gap Model is designed to allow States to enter the specifics of their own circumstances, but includes "defaults" for all estimates that were judged to be representative of the "average," "median" or "typical" State. The Gap defaults were based on the consensus of a focus group of participants including representatives from 18 States, 3 EPA regions, 8 associations, and included consideration of comments from an additional 14 States.[6]

The definition of the labor rate, as well as the use of these two sources for determining the appropriate labor rates for this analysis are discussed below.

A. Fully loaded labor rates include all costs associated with working hours

A fully loaded hourly labor rate represents the total cost for obtaining an hour's worth of work. A "fully loaded" labor rate includes: direct salary paid, paid or accrued vacation, paid or accrued sick leave, cost of other fringe benefits (e.g., health, pension, etc.), general training, indirect expenses such as professional support (e.g., clerical, accounting, supervisory, etc.), office space, utilities, telephone service, equipment (e.g., fax machines, basic computing needs such as hardware and software, etc.), etc.

One way to estimate a fully loaded labor rate is to develop an overhead rate which is applied to an hourly salary rate. EPA's previously approved ICRs for the 303(d) and 305(b) programs were based on an overhead rate of 110% for both State and federal personnel as applied the salary of a Federal Grade 10, Step 7 analyst -- the time period for the currently approved ICR (ICR Number 1560.05) covered the period from 1999 - 2002, so that the 1999 salary rate of $19.22 applied, resulting in a fully loaded rate of $40.37 per hour ($19.22 salary plus overhead of 110% x $19.22). For the time period for this ICR (2000-2003), the 2000 federal General Schedule applies: for 2000, the hourly salary of a Federal Grade 10, Step 7 is $20.50 so the fully loaded labor rate using this approach would be $43.05.

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[5]The Cadmus Group, Inc., *State Water Quality Management Workload Model, ver 3.0*, prepared for the U.S. EPA's Office of Wastewater Management, March, 2000.

[6]The States were Arkansas, Colorado, Connecticut, Delaware, Georgia, Illinois, Maine, Maryland, Massachusetts, Michigan, New Jersey, New York, North Carolina, Oklahoma, Oregon, Texas, Virginia, and Wisconsin. The associations were American Clean Water Federation (ACWF), Association of State and Interstate Water Pollution Control Administrators (ASIWPCA), Association of State Wetlands Managers, Coastal States Organization, Environmental Coalition of States (ECOS), New England Interstate Water Pollution Control Commission (NEIWPCC), Water Environment Federation (WEF), and the Wisconsin Association of Lakes.

Another way to estimate a fully loaded labor rate is to estimate all of the costs associated with an employee for a year, and then divide by the number of hours worked. Number of hours worked is the total hours in a year (generally 2080) less vacation time, sick leave, training time, etc. The Gap Analysis Effort used this approach. In the Gap's Water Quality Management Workload Model (version 3.0, March 2000), the "average," "median," or "typical" working hours for States was estimated to be 1,800 hours, and the corresponding fully loaded cost for the 1,800 hours was estimated to be $70,000 (including all overhead costs as described above, but not computer maintenance, support or periodic upgrades of hardware or software) resulting in a fully loaded hourly rate of $38.89/hour ($70,000/1,800 hours).

Both approaches are legitimate ways to estimate fully loaded labor rates, and both approaches would provide the same result if they are based on the same estimates for salary and overhead costs.

B. Available estimates of fully loaded federal and State labor rates

Estimates of fully loaded State and federal labor rates are available from ICRs for the 305(b) and 303(d) programs, and estimates for fully loaded State labor rates are available from the Gap Water Quality Management Workload Model, as discussed below.

1. Estimates of fully loaded federal and State labor rates from previous ICRs

As discussed earlier, EPA's previously approved ICRs were based on an estimated overhead rate of 110% for both State and federal personnel as applied to the "average" salary rate believed to be an analyst with a federal grade 10, Step 7 or equivalent. Previous draft ICRs, using a 1999 hourly salary rate of $19.22, resulted in an estimated fully loaded rate of $40.37 per hour. Using the 2000 federal General Schedule, the hourly salary of a Federal Grade 10, Step 7 is $20.50 so the fully loaded labor rate using this approach would be $43.05 per hour.

2. Estimates of fully loaded State labor rates from the Gap Analysis Effort

As discussed earlier in this Attachment, the defaults for the State Water Quality Management Workload Model (the "Gap Model" in this report) are considered to be the best estimate for an "average," "median" or "typical" State for their water quality management programs. This judgement was made by a focus group of participants that included representatives from 18 States, 3 EPA regions, 8 Associations, and included comments from an additional 14 States. The resulting fully loaded hourly default rate for the March, 2000 version of the Gap Model is $38.89 per hour.

C. The loaded federal and State salary rates used in this ICR

Both the federal and State labor rates are for 2000, which is appropriate for the time period for this ICR (2000-2003). The rates used in this analysis are as follows:

- *Loaded federal rate*. We adopt the estimates in previously approved and submitted ICRs for this program: a 110% overhead rate applied to the hourly salary rate of the "average" analyst for this program, a Federal Grade 10 Step 7. Using the 2000 federal General Schedule, the hourly salary of a Federal Grade 10, Step 7 is $20.50, so the fully loaded labor rate using this approach would be $43.05.

- *Loaded State rate*. We adopt the Gap model's default of $38.89/hr as of March, 2000 for the typical State.